

### **REMARKS**

The following claims are pending in the application: 1 – 17

The following claims have been amended: 1, 2, 6, 7, 8, 11, 12, 13, and 16

The following claims have been deleted: Not applicable

The following claims have been added: Not applicable

As a result of the foregoing Amendment, the following claims remain pending in the application: 1 – 17.

#### **The Rejection Under 35 U.S.C. §112, Second Paragraph**

The Examiner has rejected claims 1 through 6 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner notes that in claim 1, line 7, “first” should be added after “said” at the end of the line to eliminate any doubt which electrode is being covered by the zeolite layer.

Applicants appreciate the Examiner’s suggestion and have amended claim 1 to comport therewith. Accordingly, Applicants respectfully submit that the Examiner’s outstanding rejection may be properly withdrawn.

#### **The Provisional Double Patenting Rejection**

The Examiner has provisionally rejected claims 1 through 17 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 through 21 of co-pending Application No. 10/061,116 in view of Takahashi et al. (US Pat. No. 5,705,129).

Applicants respectfully acknowledge the Examiner's provisional rejection of claims 1 through 17 and will address such issue if and when the rejection ripens beyond a provisional rejection. For example, should Application No. 10/061,116 issue and the provisional rejection mature into a non-provisional double-patenting rejection, Applicants may file a terminal disclaimer to overcome the rejection.

#### The Rejection Under 35 U.S.C. §102(b)

The Examiner has rejected claims 1 through 17 under 35 U.S.C. 102(b) as being anticipated by Szabo et al.

Applicants respectfully submit that the Examiner has not properly cited prior art as the Szabo et al. article could not have been published more than one year prior to the January 3, 2002 filing date of the present application. The Examiner's attention is respectfully directed to page one of the Szabo et al. article wherein the following is disclosed: "Received 30 July 2001; received in revised form 25 October 2001; accepted 31 October 2001". As the article was not submitted to Elsevier until July 30, 2001, the article could not have been published until sometime after July 30, 2001 – which is less than one year prior to the filing date of the present application. Accordingly, the Examiner's outstanding rejection may be properly withdrawn as the Szabo et al. article is not available as 102(b) prior art.

#### The Rejection Under 35 U.S.C. §102(e)

The Examiner has rejected claims 12 and 14 through 17 under 35 U.S.C. §102(e) as being anticipated by Clyde et al. (US Pat. No. 6,468,407).

Applicants respectfully submit that Clyde et al. fails to teach or suggest each and every element of the invention as in claims 12 and 14 through 17. Independent claim 12, as presently amended, recites a "substantially pure zeolite disposed on said second electrode". Clyde et al., however, fails to teach or even suggest a substantially pure zeolite disposed on one of the electrodes. Rather, Clyde teaches and only teaches depositing a mixture comprising a zeolite and a metal oxide onto one of the electrodes. For example, at column 5, lines 27 – 32, Clyde discloses that the NO<sub>x</sub> reactive coating (NRC) is formed from a composition comprising a metal oxide and a support such as zeolite and alumina. Accordingly, Clyde cannot fairly be said to teach depositing a substantially pure zeolite coating on the electrode. Thus, Applicants respectfully submit that the Examiner's outstanding rejection may be properly withdrawn.

#### The Rejections Under 35 U.S.C. §103(a)

The Examiner has rejected claim 13 under 35 U.S.C. §103(a) as being unpatentable over Clyde et al. in view of Gao et al. (US Pat. No. 6,551,497) taking the position that it would have been obvious for Clyde to adopt a potentiometer, which is a conventional potential measuring means, in its measuring circuit in view of Gao, since it is clearly desirable to know and control at all times the potential between the electrodes.

Applicants respectfully submit that the Examiner's outstanding rejection may be properly withdrawn as the combination of Clyde et al. in view of Gao et al. fails to render the present invention, as recited in dependent claim 13, obvious. As discussed above, Clyde et al. fails to teach or even suggest the use of a substantially pure zeolite coating over one of the electrodes. Gao et al. fails to cure the deficiencies of the Clyde reference

so as to teach or suggest each and every element of the claimed invention. Accordingly, the Applicants respectfully submit that the Examiner's outstanding rejection may be properly withdrawn.

The Examiner has rejected claims 7 and 9 through 11 under 35 U.S.C. §103(a) as being unpatentable over Clyde in view of Kurosawa et al. (US Pat. No. 5,897,759) taking the position that it would have been obvious for Clyde to adopt the tubular form for its electrolyte in view of Kurosawa. The Examiner further takes the position that the two electrolyte forms (tubular and planar) are art-recognized equivalents and that selecting one over the other is a matter of design choice to suit the particular requirements of the sensor.

Applicants respectfully submit that the Examiner's outstanding rejection may be properly withdrawn as the combination of Clyde et al. in view of Kurosawa et al. fails to render the present invention, as recited in claims 7 and 9 through 11, obvious. As discussed above, Clyde et al. fails to teach or even suggest the use of a substantially pure zeolite coating over one of the electrodes. Kurosawa et al. fails to cure the deficiencies of the Clyde reference so as to teach or suggest each and every element of the claimed invention. Accordingly, the Applicants respectfully submit that the Examiner's outstanding rejection may be properly withdrawn.

The Examiner has rejected claim 8 under 35 U.S.C. §103(a) as being unpatentable over Clyde et al. in view of Kurosawa et al. and Gao et al.

Applicants respectfully submit that the Examiner's outstanding rejection may be properly withdrawn as the combination of Clyde et al. in view of Kurosawa et al. and Gao et al. fails to render the present invention, as recited in claim 8, obvious. As discussed

above, Clyde et al. fails to teach or even suggest the use of a substantially pure zeolite coating over one of the electrodes. Neither Kurosawa et al. nor Gao et al. cures the deficiencies of the Clyde reference so as to teach or suggest each and every element of the claimed invention. Accordingly, the Applicants respectfully submit that the Examiner's outstanding rejection may be properly withdrawn.

The Examiner has rejected claims 1 and 3 through 6 under 35 U.S.C. §103(a) as being unpatentable over Clyde et al. in view of Bannister et al. (US Pat. No. 4,193,857) or Fitterer (US Pat. No. 3,752,753) and Ross (US Pat. No. 4,663,017), taking the position that it would have been obvious for Clyde to adopt the sensor configuration of Bannister or Fitterer.

Applicants respectfully submit that the Examiner's outstanding rejection may be properly withdrawn as the combination of Clyde et al. in view of Bannister et al. or Fitterer and Ross fails to render the present invention, as recited in claims 1 and 3 through 6, obvious. As discussed above, Clyde et al. fails to teach or even suggest the use of a substantially pure zeolite coating over one of the electrodes. None of the secondary references cited by the Examiner cure the deficiencies of the Clyde reference so as to teach or suggest each and every element of the claimed invention. Accordingly, the Applicants respectfully submit that the Examiner's outstanding rejection may be properly withdrawn.

The Examiner has rejected claim 2 under 35 U.S.C. §103(a) as being unpatentable over Clyde et al. in view of Bannister et al. or Fitterer and Ross and Gao et al.

Applicants respectfully submit that the Examiner's outstanding rejection may be properly withdrawn as the combination of Clyde et al. in view of Bannister et al. or Fitterer and Ross and Gao et al. fails to render the present invention, as recited in claim 2, obvious. As discussed above, Clyde et al. fails to teach or even suggest the use of a substantially pure zeolite coating over one of the electrodes. None of the secondary references cited by the Examiner cure the deficiencies of the Clyde reference so as to teach or suggest each and every element of the claimed invention. Accordingly, the Applicants respectfully submit that the Examiner's outstanding rejection may be properly withdrawn.

**CONCLUSION**

In view of the foregoing amendment and accompanying remarks, the Applicants respectfully submit that the present application is properly in condition for allowance and may be passed to issuance upon payment of the appropriate fees.

Telephone inquiry to the undersigned in order to clarify or otherwise expedite prosecution of the subject application is respectfully encouraged.

Respectfully submitted,

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